309.04.04 Concrete ditches removed but not replaced will be paid for at the Contract unit price per square yard. The payment will include the cost to dispose of the material, regrading, topsoil, and soil stabilization matting.

SECTION 310 — CONCRETE SLOPE AND CHANNEL PROTECTION

310.01 DESCRIPTION. This work shall consist of protecting slopes and channels with cast-in-place concrete and cutoff walls as specified in the Contract Documents or as directed by the Engineer.

310.02 MATERIALS.

Crusher Run Aggregate CR-6	901.01
No. 57 Aggregate	901.01
Curing Materials	902.07
Form Release Compound	902.08
Concrete Mix No. 2	902.10
Welded Steel Wire Fabric	908.05
Joint Sealer	911.01
Preformed Joint Fillers	911.02
Roofing Paper	911.07
Borrow	916

310.03 CONSTRUCTION.

310.03.01 Excavation. Excavation, including excavation for cutoff walls shall conform to Section 602. Refer to 402.03.01 for excavated material

310.03.02 Cast-In-Place Concrete. Cast-in-place concrete slope protection shall be constructed in alternate strips so that construction joints are all in one direction and that tooled joints run perpendicular to the construction joints. The result shall be a checkerboard pattern having squares not less than 3 ft nor more than 5 ft. The size of the squares and the size of squares around curved surfaces shall be as directed by the Engineer. Joints and cutoff walls shall be constructed as specified in the Contract Documents or as directed by the Engineer.

310.03.03 Forms. Forms shall conform to Section 603.

310.03.04 Concreting. Concrete mixing shall conform to 915.03.04. Volumetric batching and continuous mixing will be permitted on this work. Areas subject to the infiltration of water shall be dewatered by

methods acceptable to the Engineer prior to placing the concrete. The concrete shall be spread, tamped or otherwise consolidated to secure maximum density as it is placed. It shall be struck off with an approved screed to the elevation of the top of the forms. The surface shall have a broomed finish. Plastering of the surface is prohibited. All edges and joints shall be edged with a 1/4 in. edging tool.

- **310.03.05** Cold Weather Construction and Curing. Refer to 520.03.02 for cold weather construction and to 520.03.12 for concrete curing.
- **310.03.06 Backfill.** After the forms have been removed, backfill shall be placed and compacted as directed by the Engineer.
- **310.04 MEASUREMENT AND PAYMENT.** The payment will be full compensation for all concrete, forms, excavation, curing, joint sealer and filler, backfill, compaction, disposal of excess or unsuitable material, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.
- **310.04.01** Concrete Slope and Channel Protection and Concrete Slope Protection for Streams will be measured and paid for at the Contract unit price per square yard of finished surface.
- **310.04.02** Cutoff Walls will be measured and paid for at the Contract unit price per linear foot.
- **310.04.03** The removal and disposal of unsuitable material below the subgrade will be measured and paid for at the Contract unit price per cubic yard for Class 2 Excavation. The payment will include the cost of replacing the unsuitable material with suitable material acceptable to the Engineer except as specified in 310.04.04.
- **310.04.04** When Borrow or Selected Backfill using No. 57 Aggregate or Selected Backfill using Crusher Run Aggregate CR-6 is approved by the Engineer as replacement material for the Class 2 Excavation, it will be measured and paid for at the Contract unit price per cubic yard for the pertinent item specified in the Contract Documents.

SECTION 311 — RIPRAP DITCHES

311.01 DESCRIPTION. This work shall consist of constructing riprap ditches and riprap ditches with capping as specified in the Contract Documents or as directed by the Engineer.